125 *105

Memo

QC6- Inspect dimensions to drawing

0.00

0.00

14H/8

DAS

10

Quality Control

DQA: Date:			Work order non-	DART									
QA Closed:		Date:								W	ork Order u	odate only	
Work Orde	or.				DISPOSITION				AGAINST	DE	PARTMENT	/PROCESS	
Part N	lo.		. 27 - 79 - 12 - 17		Rework Scrap Use-as-is Suspected Unapproved		Skid-tube Crosst Machining Small Thermoforming Finish Large Fab Compo			Prod. Eng. Coor. ing Rec/Store/Packaging			Engineering Quality Other
Root				Desci	ription of work order update		nitial	Acti	ion		Sign &		
Cause	Date	Step	Qty		or non-conformance	i i	ief Eng				Date	Verification	QC Inspector
Design Doc/Data Equip/Tooling Handling/Pre Material Operator Offset/Setup Process Supplier Training Transport Unapproved									•				
						FA	ULT CAT	TEGORY					
Landir	ng Gear				General					_	-	_	
	Bending Centre Not Concentric Cracks Crimp/Kink/Ripple/Wave Cuffs Crushing Heat Treat Inspection Strip in Tube Marks/Chatter Turning Sequence		Bend BOM/Route Broken/Damage/Defect Burrs Contamination Countersink Cut Too Short Drawing Drill Holes		Folio/Program Grain Hardware Inspection Incomplete/Unqualified Instructions Incomplete/Unclear Misaligned/off center Mislabeled Misread Off-set				Outside Dim Over/Under Part Incorred Part Lost/Mi Part Moved Positioned V Power Loss/	tolerance ci ssing Vrong	Pressure/Forced Set-up Temperature/Cure Weld Wrong Stock Pulled Other		
				<u> </u>	Finish		1	Calibration					
	Wave/Tw	ist in Tub	oe		Fit/Function		Out of 9	Sequence					<u> </u>

113142

Page 2

Monaay, June	09, 2014 1:5.	5:17 PM												
Item ID: Revision ID:	D3463-3				Accept	*N900	040	100) *	Setup		*N	S1*	
Item Name:	Step		i .								Stop	*N	S2*	
Start Date:	2/10/14	Start Qty: 12.00		*12*		Cust Item 1	ID:							
Required Date	e: 2/10/14	Req'd Qty: 12.00		*12*		Customer:								
Reference:		•		17										
Approvals:	Process Pl	an:	Date:	1	Tooling:	D	ate:			Run	Start	*N	R1*	
	QC:		Date:_		SPC (Y/N):	D	ate:				Stop	*N	R2*	
Sequence ID/ Work Center	ID	Operation Description			Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	t Rej Qty		Reject Number	Insp. Stamp	
130					0.00				10.			1	1, 1,	01
130		Small Fab							13×			$-\ell$	14/4/	-8-1
Small Fab		Memo			0.00			0	AS				-	. /. [
Small Fab		1-Form Dimp Dwg D3463.	ples as per	Dwg D3463 usi	ng DT3463-3T12-Debur	rr3-Form as			30 9-89				(1410811
140	÷	QC5- Inspect part comple	eteness to st	tep on W/O	0.00				\nearrow				DAS 38	2.2
*14 0 *									(12)		C	AS 9	9-89 /	4-8-2
QC Quality Control		Memo			0.00							9-89		
150		Identify as per dwg & Sto	ck Locatio	on: <u>[V/A</u> co>	0.00									
150					0.00				10		Œ	14-	8-22	_
Packaging		Memo	Z INI I ADC	TE EAD*****	0.00							_		
Packaging		*****STOCI	K IN LARC	GE FAB****										

DQA: Date:			- ` `λΔΡΤ											
QA Closed:			Date:			WORK ORDER NON	-C(ONFO	RMANCE / UPDATE	14/0	ul. Oudor ur	odata ambi — [_	AEROSPACE
QA Closed.			Date:					<u> </u>		WO	rk Order up	date only		
Work Ord	er:					DISPOSITION			AGAINST	DEP	ARTMENT	/PROCESS		
	-					Rework			Skid-tube Crosstube	Water Jet				Engineering
Part I	Vo.					Scrap			Machining Small Fab	-	Pro	d. Eng. Coor.	7	Quality
	-					Use-as-is		Therr	noforming Finishing		Rec/Stor	e/Packaging		Other
NCR I	No					Suspected Unapproved			Large Fab Composite			Supplier		
Root				· · ·	Desci	ription of work order update		Initial	Action		Sign &			
Cause		Date	Step	Qty		or non-conformance	Ch	nief Eng	Description		Date	Verification	ı 📗	QC Inspector
Design														
Doc/Data	Щ													
Equip/Tooling	Ш													
Handling/Pre	Ц													
Material	Ш		}											
Operator	\vdash													
Offset/Setup	Н													
Process	Н													
Supplier	Н												İ	
Training Transport	Н	2.	,											
Unapproved	Н													
опаррточеа	ш		1	L	L	. —	FAI	ULT CA	TEGORY					
Landi	ng G	iear				General					···			
	\Box	Bending				Bend		Folio/F	Program	\Box	Outside Dim	ensions	P	ressure/Forced
		Centre No	ot Concer	ntric		BOM/Route		Grain	-	П	Over/Under	tolerance	S	et-up
		Cracks				Broken/Damage/Defect		Hardwa	are	F	Part Incorrec	:i	Τí	emperature/Cure
		Crimp/Kir	nk/Ripple	/Wave		Burrs		Inspect	ion Incomplete/Unqualified		Part Lost/Mi	ssing	v	/eld
		Cuffs				Contamination		Instruct	tions Incomplete/Unclear		art Moved		v	rong Stock Pulled
	Ш	Crushing				Countersink		Misalig	gned/off center	\Box F	ositioned W	/rong		
	Ш	Heat Trea	it			Cut Too Short		Mislabe	eled		ower Loss/S	Surge	_]0	ther
	Ш	Inspection	n Strip in	Tube		Drawing		Misrea	d	_	****			
	Ш	Marks/Ch	atter			Drill Holes	L	Off-set						
		Turning S			L.	Finish	L	4	Calibration					
	ıl	Wave/Tw	ist in Tub	ne .	- 1	Fit/Function	1	Out of	Sequence					

Work Ord Monday, June (*11:	3142*							Page 3
Item ID: Revision ID: Item Name:	D3463-3 Step			Accept	*N900	040	100)*	Setup	Start Stop		S1* S2*
Start Date: Required Date Reference:	2/10/14 : 2/10/14	Start Qty: 12.00 Req'd Qty: 12.00	*19* *19*		Cust Item l Customer:	ID:					,	,
Approvals:	Process Pl QC:	an:	Date:	Tooling: SPC (Y/N):		ate:			Run	Start Stop		R1* R2*
Sequence ID/ Work Center I	D	Operation Description QC21- Final Inspection -	Work Order Release	Set Up/ Run Hours	Tool ID	Tool#	Plan Code	Accep Qty	ot Rej Qty		leject Iumber	Insp. Stamp

0.00

Memo

160

Quality Control

MW 14-08-22 MW 14-08-22

DQA:			Date:			-							
QA Closed:			Date:			WORK ORDER NON	-C(ONFO	RMANCE / UF		ork Order up	ndate only	AEROSPACE
Q/ Closed.	-		Date.					1			ork Order up	date only	
Work Ord	er:					DISPOSITION							
					_	Rework			Skid-tube	Crosstube	7	Water Jet	Engineering
Part I	۷o.					Scrap			Machining	Small Fab	Pro	d. Eng. Coor.	Quality
						Use-as-is		Therr	moforming	Finishing	Rec/Sto	re/Packaging	Other
NCR I	۷o.	• · · · • · · · · · · · · · · · · · · ·				Suspected Unapproved			Large Fab	Composite		Supplier	
				<u> </u>							l a: a		
Root		Data	Can	O4	Desci	ription of work order update		Initial	Acti		Sign &		
Cause	Γ	Date	Step	Qty		or non-conformance	Cn	ief Eng	Descri	iption	Date	Verification	QC Inspector
Design	\vdash												
Doc/Data Equip/Tooling	\vdash												
Handling/Pre	-												
Material	-								:				
Operator									:				
Offset/Setup	-				·								
Process	_												
Supplier	\vdash												
Training													
Transport					l				1				
Unapproved	\vdash								:				
<u>`</u>	-	l		C	· .		FAI	ULT CA	TEGORY		<u> </u>		
Landi	ng (Gear			•	General			<u> </u>				
	Г	Bending				Bend		Folio/F	Program		Outside Dim	ensions [Pressure/Forced
		Centre No	ot Concer	ntric		BOM/Route		Grain	-		Over/Under	tolerance	Set-up
		Cracks				Broken/Damage/Defect		Hardwa	ire		Part Incorred	:i	Temperature/Cure
		Crimp/Kir	nk/Ripple	/Wave		Burrs		Inspect	ion Incomplete/Un	qualified	Part Lost/Mi	ssing	Weld
		Cuffs				Contamination		1	tions Incomplete/U	·	Part Moved		Wrong Stock Pulled
		Crushing				Countersink		Misalig	ned/off center	 	Positioned W	/rong	
		Heat Trea	it			Cut Too Short		Mislabe	eled		Power Loss/S	Surge	Other
		Inspectio	n Strip in	Tube		Drawing		Misread	d			_	
		Marks/Ch	atter			Drill Holes		Off-set					
		Turning S	equence			Finish		Out of	Calibration				
		Wave/Tw	ist in Tub	e		Fit/Function		Out of Sequence					

Picklist Print

Monday, June 09, 2014 1:55:20 PM

Work Order ID: 113142

113142

Parent Item:

D3463-3

Parent Item Name: Step

D3463-3

Start Date: 2/10/14

Required Date: 2/10/14

Start Qty: 12.00

Required Qty: 12.00

Comments:

IPP REV. A 05.11.18 NEW ISSUE

EC

IPP Rev:B

Now on Waterjet 056-08-15 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S16GA		Purchased	No			100	sf	144.8670	0.243	4			
M304S16	SGA								**		CLIY	104/1	7

M304S16GA

304/316 Sheet .063

Location Loc Qty Loc Code **MAT020** 144.867 M127821 75.567 M128423 1.2 M129192 68.1

m129545

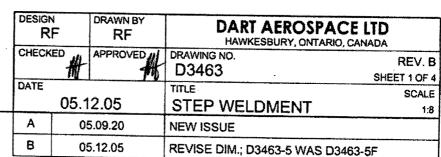
DQA:	A: Date:						TOAF	2T						
QA Closed:			Date:			WORK ORDER NON	-C(ONFO	RMANCE / U		Vork Order u	odate only	AEROSI	PACE
Work Ord					_	DISPOSITION					EPARTMENT	<u> </u>	<u> </u>	
WORK Ord	er.					Rework	1	Skid-tube Crosstube			7	Water Jet	Consissing	
Part I	Nο					Scrap		Skid-tube Crosstub Machining Small Fa			Pro	d. Eng. Coor.	Engineering Quality	\blacksquare
						Use-as-is			noforming	Finishing		re/Packaging		
NCR I	No.					, , ,		Large Fab	Composite		Supplier			
		r	1		-		<u> </u>	<u> </u>	1					
Root		D-4-	Char	0	Desc	ription of work order update	ì	Initial	1	ion	Sign &	.,		
Cause	Γ	Date	Step	Qty		or non-conformance	Cr	nief Eng	Descr	ription	Date	Verification	n QC Inspec	tor
Design Doc/Data	_						İ							
Equip/Tooling	-	•									,			
Handling/Pre											ļ			
Material	一	-												
Operator		1												
Offset/Setup		1												
Process		1	:											
Supplier]	ŀ											
Training		1												
Transport]												
Unapproved														
							FΑ	ULT CA	TEGORY					
Landi	ng (Gear				General				_	_			
		Bending				Bend		•	Program	L	Outside Dim	ensions	Pressure/Force	d
		Centre No	ot Concei	ntric	L	BOM/Route	_	Grain		L	Over/Under	tolerance	Set-up	
	<u> </u>	Cracks				Broken/Damage/Defect	_	Hardwa			Part Incorred		Temperature/C	ure
		Crimp/Kii	nk/Ripple	/Wave		Burrs		Inspect	ion Incomplete/Ur	nqualified	Part Lost/Mi	ssing	Weld	
	L	Cuffs			L	Contamination		4	ions Incomplete/L	Jnclear	Part Moved		Wrong Stock Pu	ılled
	_	Crushing				Countersink	$oxed{oxed}$	1	gned/off center	1	Positioned V			
		Heat Trea				Cut Too Short	_	Mislabe		L	Power Loss/	Surge	Other	
	_	Inspectio	•	Tube	<u> </u>	Drawing	_	Misrea						
		Marks/Ch			_	Drill Holes		Off-set						
	<u> </u>	Turning S				Finish	_	4	Calibration					
	L	Wave/Tw	ist in Tul	oe -		Fit/Function		Out of	Sequence					

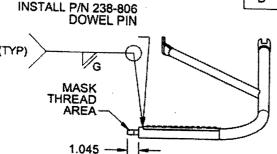
D3065-5DART AEROSPACE LTD	Work Order:	113142
Description: Step	Part Number:	D3463-3
Inspection Dwg: D3463 Rev: B		Page 1 of 1

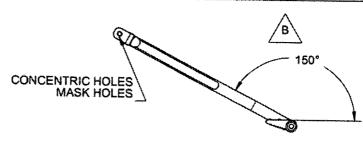
	FIRS	ST ARTICLE IN	NSPECTI	ON CHE	CKLIST		
		X First Arti	cle	Prot	otype		
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Com	ments
Ø0.191	+0.005/-0.001	0,193,	_		V	JEmoi	
7.00	+/-0.030	7.003"	_		v		
5.00	+/-0.030	5.004"	~	_	V		
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0.750	+/-0.010	0.750"	-		V	·	
0.875	+/-0.010	0.876)		V		
1.000	+/-0.010	1.004			V		
0.500	+/-0.010	0.209,			1		
	DAS 23		DAS				
leasured by:	9-89	Audited by:	27 ————————————————————————————————————		Prototype A	pproval:	N/A
Date:	14-07-8	Date:	MĨĨ	18		Date:	N/A

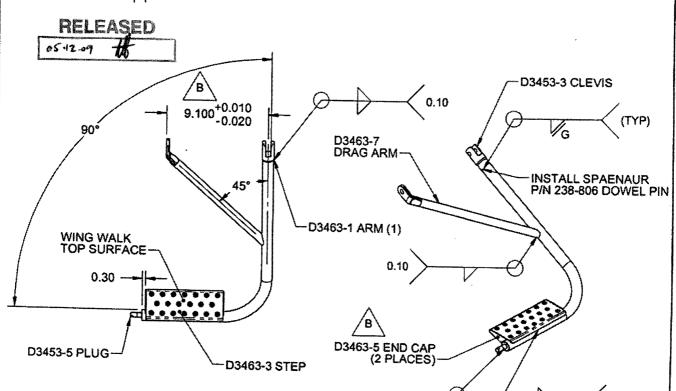
			' ' ' '	
Rev	Date	Change	Revised by A	pproved
Α	07.10.15	New Issue		N/
			-, 7,	











NOTES:

- 1) WELD PER DART QSI 004

D3463-042 STEP WELDMENT ASSEMBLY D3463-041 OPPOSITE

- 1) WELD PER DART QSI 004
 2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3
 BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
 4) ALL DIMENSIONS ARE IN INCHES
 5) BREAK ALL UNMARKED SHARP EDGES 0.005 TO 0.010
 6) IDENTIFY WITH DART P/N USING FINE POINT PERMANENT INK MARKER

 $V_{\mathbf{G}}$

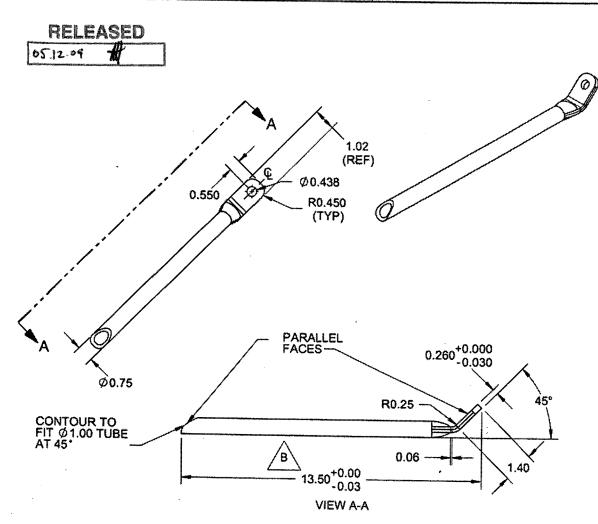
2 Š

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DESIGN RF	DRAWN BY RF		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA								
CHECKED	APPROVED	DRAWING NO. D3463	REV. B SHEET 3 OF 4								
DATE 05.1	2.05	STEP WELDMENT	SCALE 1:4								



D3463-7 DRAG ARM

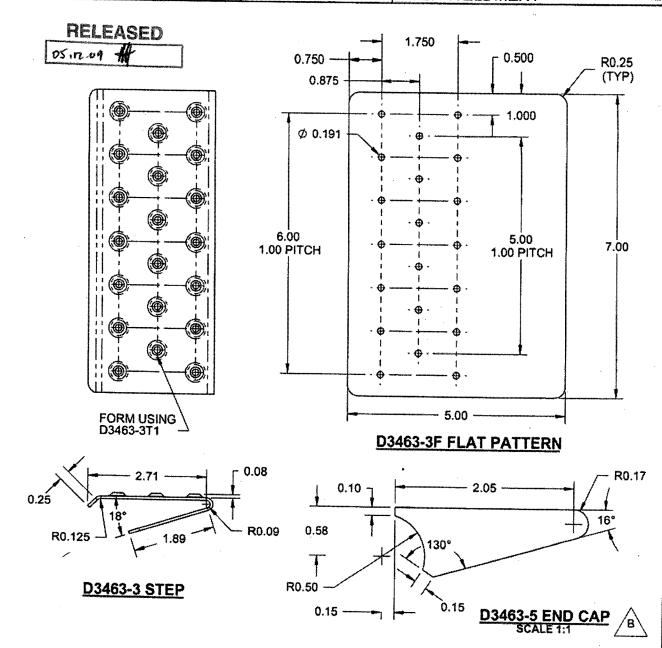
NOTES:

- 1) MATERIAL: AISI 316/304 SS SEAMLESS TUBING (REF. DART SPEC. M304TR0.750W.120) 2) FINISH: NONE 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED 4) ALL DIMENSIONS ARE IN INCHES 5) BREAK ALL UNMARKED SHARP EDGES 0.005 TO 0.010

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DESIGN RF	DRAWN BY RF	DART AEROSPA(HAWKESBURY, ONTARIO	
CHECKED	APPROVED	DRAWING NO. D3463	REV. B SHEET 4 OF 4
DATE 05.1	2.05	STEP WELDMENT	SCALE 1:2



NOTES:

- 1) MATERIAL: AISI 304/316 SS SHEET, 0.060 THICK (REF. DART SPEC. M304S16GA) 1) MATERIAL: AIS 304/310 35 SHEET, 0.000 THICK (REF. DAKT SEEC. 2) FINISH: NONE
 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED 4) ALL DIMENSIONS ARE IN INCHES
 5) BREAK ALL UNMARKED SHARP EDGES 0.005 TO 0.010

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T.P.I. INDUSTRIES INC.

148 GOODFELLOW DELSON, QUÉBEC J5B 1V4 CANADA

Tel: (450) 633-0484 Fax: (450) 633-0879

Packing Slip

Packing Slip No.:

6177

Date:

2014-07-02

Page:

1

Sold to:	Ship to:
Dart Aerospace Michael Grégoire 1270 Aberdeen Hawkesbury, Ontario K6A 1K7 Canada	Dart Aerospace Michael Grégoire 1270 Aberdeen Hawkesbury, Ontario K6A 1K7 Canada
Order No.: 24577	Sold By: JONATHAN LESSARD
Shipped By:	Ship Date: 2014-07-02
Tracking No.:	

liem No.	omi 7		PERMINIT		- Quantity
564-5	Chaque	d3564-5			
564-9	Chaque	d3564-9			24
564-11	Chaque	d3564-11			24
791-1	Chaque	d3791-1 wearpad			24
537-3	Chaque	d3537-3 wearpad		•	24
537-1	Chaque	d3537-1 wearpad	And the second s	and the second second	40
537-1	Chaque	d3537-1 wearpad			60
791-1	Chaque	d3791-1 wearpad		•	60
154	Chaque	d2154 bracket stud			20
144	Chaque	d2144 hinge doubler			40
095-045	Chaque	d4095-045 wearplate assy			40
095-043	Chaque	d4095-043			12
095-041	Chaque	d4095-041 wearplate assy			12
859-041	Chaque	d3859-041 wearplate			12
952-1	Chaque	d4952-1 wearplate			16
095-051	Chaque			·	20
095-049	Chaque	d4095-051 wearplate assy			20
095-047	Chaque	d4095-049 wearpad			16
798-041	Chaque	d4095-047 wearplate assy			20
135-1	Chaque	d4798-041 wearplate assy			16
360-041	Chaque	d4135-1 wearpad			10
012-111	Chaque	d4360-041 weraplate assy			8
	Chaque	d2012-111 bracket			40
324-5	Chaque	d2324-5 strap			40
947	Chaque	d2947 clamp			60
171-1	Chaque	d3171-1 angle bracket			20
463-3	Chaque	d3463-3 step)			12
512-1	Chaque	d3512-1 wearplate			12
529-1	Chaque	d3629-1 bracket			20
955-5	Chaque	d3955-5 plate		ļ	
021-5	Chaque	d4021-5 blanking plate			12
556-1	Chaque	d3556-1 clamp			40
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mment: N	et / 30 from date of i	invoice 2% svc. chg. on invoices of	wor 20 days		
	or, oo nom wate or	invoice 2 /0 svc. city. On invoices (over 50 days		